



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,528	07/27/2001	Pito Salas	ITI-002CN	3156
30368	7590	06/08/2005	EXAMINER	
EMC CORPORATION 6801 KOLL CENTER PARKWAY PLEASANTON, CA 94566			HAYES, JOHN W	
			ART UNIT	PAPER NUMBER
			3621	

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,528

Applicant(s)

SALAS ET AL.

Examiner

John W. Hayes

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,9-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,9-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3621

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 April 2005 has been entered.

Status of Claims

2. Applicant has amended claim 1 and canceled claims 51-57 in the amendment filed 15 April 2005. Claims 5, 8 and 15-50 were previously canceled. Thus, claims 1-4, 6-7, 9-11 and 13-14 are the only claims that remain pending and are presented for examination.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Terminal Disclaimer

4. The terminal disclaimer filed 15 April 2005 is not proper for the following reason

5. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Art Unit: 3621

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 1 only recites an abstract idea. The recited steps of receiving an encrypted license string, verifying the license string by decrypting it and determining valid ranges and allowing access to a product does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to provide access to a product by validating licensing information.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. An invention, which is eligible or patenting under 35 U.S.C. 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a "use, concrete and tangible result". The test for practical application as applied by the examiner involves the determination of the following factors"

- (a) "Useful" – The Supreme Court in *Diamond v. Diehr* requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to

Art Unit: 3621

determine whether the asserted utility is accomplished. Applying utility case law the examiner will note that:

- i. the utility need not be expressly recited in the claims, rather it may be inferred.
- ii. if the utility is not asserted in the written description, then it must be well established.

(b) "Tangible" – Applying *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of an abstract idea and therefore, is nonstatutory under 35 U.S.C. 101. In *Warmerdam* the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium, which enabled its functionality to be realized.

(c) "Concrete" – Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

In the present case, the claimed invention produces an encrypted licensing string (i.e., repeatable) used in determining and allowing access to a product (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3621

9. Claims 1, 4, 6-7, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barber et al, U.S. Patent N. 5,390,297 in view of Griswold, U.S. Patent No. 5,940,504 and Ross et al, U.S. Patent No. 5,553,143.

As per Claim 1, Barber et al disclose a method for controlling access to a product, the method comprising:

- receiving a license string that controls access to the product, the license string being generated using a cryptographic process by encoding information corresponding to a license identifier information (Col. 6, lines 43-60; Col. 9 line 67-Col. 10 line 7);
- verifying the license string by decoding the license string to identify the information (Col. 10, lines 1-8) and determining that the information is within a valid range (Col. 10, lines 1-15); and
- allowing access to the product based on verifying the license string (Col. 10, lines 1-27).

Barber et al, however, fails to explicitly disclose wherein the encoded information corresponds to at least one of 1)a date of creation of the product, 2) a version of the product, 3) a date of request for the product, and 4)a date of generation of the license string. Griswold discloses a licensing management system and further teach sending datagrams to a licensor's site to request authorization for access to a product wherein the datagram includes encrypted information corresponding to a version of the product such as a product model number (Figures 2 and 4; Col. 5, lines 45-50; Col. 6, lines 44-48; Col. 7, line 65-Col. 8 line 5). Griswold further disclose decrypting the information and validating this information to allow access to the product after verifying the license has not expired (Col. 9 line 46-Col. 10 line 36). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Barber et al and encode any information that corresponds to a license such as a version or model number of the product under control of the license in lieu of a license identification information as taught by Griswold. One would have been motivated to use any type of equivalent identifier in order to effectively identify the license or the product being controlled by the license. Griswold provides motivation by indicating that the types of information within the license database may require other types than specifically shown (Col. 6 line 63-Col. 7 line 3).

Art Unit: 3621

Barber et al further fail to disclose wherein the data encoded to generate the license string comprises a license data and a validation data and verifying the license string further includes (i) decoding the license string to obtain the license data and the validation data, (ii) computing a generated validation data based at least in part on at least a portion of the decoded license data, and (iii) comparing the decoded validation data with the generated validation data. Ross et al disclose a method for electronic licensing and teach a method of validating a license by decoding the license string to obtain the license data and the validation data (Col. 9, lines 1-11; Col. 7, lines 40-65; decrypting the signature to obtain the clear text (license data) and the validation data (message digest)), computing a generated validation data based at least in part on at least a portion of the decoded license data (Col. 9, lines 1-11; Col. 7, lines 40-65; applying the clear text to an algorithm to generate the message digest) and comparing the decoded validation data with the generated validation data (Col. 9, lines 1-11; Col. 7, lines 40-65; comparing the two message digests). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Barber et al and include the ability to validate the license as taught by Ross et al in an effort to ensure that the license is valid and has not been altered or tampered with in any way. Using digital signatures and hashing algorithms to generate message digests has long been known in the encryption art as an effective method for validating a message or any type of text or data.

As per Claims 4 and 6-7, Barber et al and Griswold do not specifically disclose that the encoding method includes using block ciphers or character text strings. Examiner takes Official Notice that these encoding methods are well known in the cryptography arts and it would have been obvious to one having ordinary skill in the art to use block ciphers and character text strings in order to take advantage of well known encoding methods as a matter of convenience. With respect to claim 7, It is well known in the computer arts to "keep it simple" with respect to user interaction with computer programs. The capital letters O and I are easily confused with the numbers 0 and 1 which add to the complexity of reading what may be a long string of characters. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to exclude the characters capital O, capital I, and the numbers 0 and 1 from

Art Unit: 3621

the License string generated by the invention of Barber et al ('297) in order to minimize user confusion in the entry of the license string.

As per **Claim 10**, Barber et al ('297) further discloses the license string controls access to a single facility, see Column 8, lines 40-41.

As per **Claim 11**, Barber et al ('297) further discloses the license string controls access to multiple facilities, see Column 8, lines 20-48.

10. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barber et al, U.S. Patent No. 5,390,297, Griswold, U.S. Patent No. 5,940,504 and Ross et al, U.S. Patent No. 5,553,143 as applied to claim 1 above, and further in view of Smartsoft (Product Sales and Upgrade Sales).

As per **Claims 2-3**, Barber et al further disclose that the customer supplies encrypted license string information, however, fails to specifically disclose that this is provided using a dialog box or entry field. Smartsoft discloses using a dialog box or entry field to provide the license string (Page 4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Barber et al and provide this license string any number of ways including using a dialog box or entry field as taught by Smartsoft in an effort to provide convenience and flexibility to the end user by using a web based system.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barber et al, U.S. Patent No. 5,390,297, Griswold, U.S. Patent No. 5,940,504 and Ross et al, U.S. Patent No. 5,553,143 as applied to claim 1 above, and further in view of He et al, U.S. Patent No. 6,088,451.

Art Unit: 3621

As per **Claim 9**, Barber et al ('297) does not specifically disclose wherein the license string includes a first checksum and verifying the license string comprises generating a second checksum based on the information and comparing the second checksum with the first checksum.

He et al (451) teaches the use of a checksum, a well known method for data string validation, see Column 10, lines 18-47, for the benefit of protecting information from being accidentally or maliciously changed and ensuring correct communication between user and the network.

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to include the checksum validation taught by He et al ('451) in the invention of Barber et al ('279) for the benefit of protecting information from being accidentally or maliciously changed and ensuring correct communication between user and the network.

12. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barber et al, U.S. Patent No. 5,390,297, Griswold, U.S. Patent No. 5,940,504 and Ross et al, U.S. Patent No. 5,553,143 as applied to claim 1 above, and further in view of Edwards Jr, U.S. Patent No. 5,014,234.

As per **Claim 13**, Barber et al ('297) does not specifically disclose wherein access to the product is allowed for only a predetermined period of time in the absence of verifying the license string.

Edwards Jr ('234) teaches limited usage for predetermined period of time before the license string is entered, see Column 1, line 25 – Column 2, line 3 for the benefit of providing a “try before you buy” license feature and still allow protection of the software.

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the invention of Barber et al ('297) to allow usage for a predetermined period of time before the license string is entered providing a “try before you buy” license feature and still allow protection of the software.

As per **Claim 14**, Barber et al ('297) does not specifically disclose entry of the license string extends the predetermined time for which the product will function.

Art Unit: 3621

Edwards Jr ('234) teaches entry of the defuse number extends the usage for predetermined period of time, see Column 8, lines 16 – 39 for the benefit of allowing continued use of the product and still allow protection of the software.

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the invention of Barber et al ('297) to allow usage for a predetermined period of time after the license string is entered for the benefit of allowing continued use of the product and still allow protection of the software.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-4, 6-7, 9-11 and 13-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,314,408 B1 in view of Barber et al, U.S. Patent No. 5,390,297 and Ross et al, U.S. Patent No. 5,553,143.

As per Claims 1-4, 6-7, 9-11 and 13-14, claim 1 of U.S. Patent No. 6,314,408 B1 recites all the limitations of claim 1 of the instant application, however, fails to recite verifying the license string by decoding the license string to identify the information and determining that the information is within a valid range. Barber et al disclose verifying the license string by decrypting the license string to identify the first information item and determining that the first information item is within a first valid range (Col. 10, lines 1-15). Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify claim 1 of U.S. Patent No. 6,314,408 B1 and include a verification step as taught by Barber et al

Art Unit: 3621

in order to determine if the license string is valid in an effort to ensure that proper access to the product being licensed is accomplished.

Claim 1 of U.S. Patent No. 6,314,408 B1 further fail to recite wherein the data encoded to generate the license string comprises a license data and a validation data and verifying the license string further includes (i) decoding the license string to obtain the license data and the validation data, (ii) computing a generated validation data based at least in part on at least a portion of the decoded license data, and (iii) comparing the decoded validation data with the generated validation data. Ross et al disclose a method for electronic licensing and teach a method of validating a license by decoding the license string to obtain the license data and the validation data (Col. 9, lines 1-11; Col. 7, lines 40-65; decrypting the signature to obtain the clear text (license data) and the validation data (message digest)), computing a generated validation data based at least in part on at least a portion of the decoded license data (Col. 9, lines 1-11; Col. 7, lines 40-65; applying the clear text to an algorithm to generate the message digest) and comparing the decoded validation data with the generated validation data (Col. 9, lines 1-11; Col. 7, lines 40-65; comparing the two message digests). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify claim 1 of U.S. Patent No. 6,314,408 B1 and include the ability to validate the license as taught by Ross et al in an effort to ensure that the license is valid and has not been altered or tampered with in any way. Using digital signatures and hashing algorithms to generate message digests has long been known in the encryption art as an effective method for validating a message or any type of text or data.

Conclusion

15. **Examiner's Note 1:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the

Art Unit: 3621

claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

16. Examiner's Note 2: Examiner would also like to point out that Official Notice was used in previous office actions to indicate that it is old and well known in the art to use encoding methods such as block ciphers or character text strings. Examiner also indicated that it is well known in the computer arts to "keep it simple" with respect to user interaction with computer programs. The capital letters O and I are easily confused with the numbers 0 and 1 which add to the complexity of reading what may be a long string of characters. Since applicant has not attempted to traverse this Official Notice statement, examiner is taking the common knowledge or well-known statement to be admitted prior art.

17. The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hasebe et al disclose a software license protection method using cryptography wherein a request is for authorized use of the software is encrypted and subsequently validated by an accounting server.

Art Unit: 3621

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (571)272-6708. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (571)272-6712.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Commissioner of Patents and Trademarks

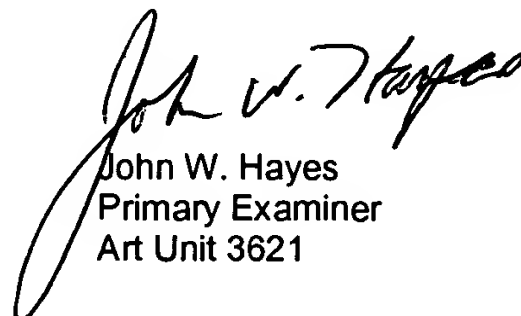
Washington, D.C. 20231

or faxed to:

(703) 872-9306 [Official communications; including
After Final communications labeled
"Box AF"]

(571) 273-6708 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.


John W. Hayes
Primary Examiner
Art Unit 3621

June 3, 2005